To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS

From: Becky Koehler

Bureau Chief of Personnel Management

Subject: Technical Vacancy

Date: January 26, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement January 29, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m.** on **Friday**, **February 9**, **2018**. Applications will not be accepted after that time and date.

NOTE: Applications will be accepted from qualified permanent DOT employees only. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.

If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

ET IV Geotechnical Field Supervisor

Region 5/District 9/Project Implementation

Highways Project Implementation

Carbondale

Attachments 42463

Technical Applications PM1080 rev 6/1/17**must be received by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to DOT.CO.BPM.EmploymentApplications@Illinois.gov by Friday, February 9, 2018, 4:30 p.m. Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: Applications will be accepted from qualified permanent DOT employees only. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.



Position Summary Sheet

An Equal Opportunity Employer

Classification: Engineering Technician IV Salary: \$4,695 - \$8,775

Position Title: Geotechnical Field Supervisor Union Position: X Yes No

Position Number: PW014-23-59-203-12-01 IPR#: 42463

Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation/Region 5/District 9/Bureau of Project Implementation/2801 W Murphysboro Rd, Carbondale, IL

Description Of Duties:

This position is accountable for ensuring effective embankment construction practices and subgrade controls. In addition, this position is accountable for assuring the proper placement and compaction of hot mix asphalt pavements, stabilized shoulder, hot mix asphalt pavement patching and granular materials by supervising the in-place density testing of these materials as they are placed on construction projects within District Nine.

Special Qualifications:

Required:

- · Valid driver's license
- 24/7 emergency call-out availability
- Extensive districtwide and occasional statewide travel with overnight stays; and occasional overtime during evening and weekends
- Heavy/repetitive lifting up to 50 lbs.
- Ability to work in confined spaces; climb steep terrain; wade in water; deal with animals, insects, rodents, snakes; perform outdoor
 work in a variety of conditions including, but not limited to inclement weather (hot, cold, wet, windy, muddy), active construction
 sites and roadways open to traffic

Desired:

- An Associate Degree from an accredited two-year civil engineering technology program or two years of college in preengineering or civil engineering technology
- Eight years of experience in performing a variety of technical tasks of which at least four years should be related to civil
 engineering
- Extensive knowledge of the principles and practices of civil engineering and the application of engineering techniques to the design, construction, and maintenance of public works
- Extensive knowledge of mathematics
- · Ability to operate engineering field and office instruments and physical laboratory testing equipment
- Strong oral and written communication skills, and problem-solving and decision-making skills

Shift/Remarks:

8:00 am - 4:30 pm / Monday - Friday

**Technical Application PM1080 (revised 6/1/17) is required. No previous version of the PM1080 will be accepted.

ILLINOIS DEPARTMENT OF TRANSPORTATION POSITION DESCRIPTION

DATE: September 1, 2017 **POSITION:** Geotechnical Field Supervisor

APPROVED BY: Jeffrey L Keirn OFFICE/DIVISION: OHPI, Region 5/District 9, Project

Implementation

CODE: PW014-23-59-203-12-01 REPORTS TO: Geotechnical Engineer

Position Purpose

This position is accountable for ensuring effective embankment construction practices and subgrade controls. In addition this position is accountable for assuring the proper placement and compaction of hot mix asphalt pavements, stabilized shoulder, hot mix asphalt pavement patching and granular materials by supervising the inplace density testing of these materials as they are placed on construction projects within District Nine.

Dimensions

Subordinate Personnel: 4 permanent
Contract Value of Roadway Projects: \$8 - \$15 Million
Average Annual Value of Program: \$45 Million

Nature and Scope

This position reports to the Geotechnical Engineer. Reporting to this position are Senior Embankment and Nuclear Technicians.

The incumbent in this position supervises project personnel who perform embankment density and moisture tests, aggregate density and moisture tests, subgrade Dynamic Cone Penetrometer tests, and hot mix asphalt density tests on construction projects to assure conformance with plans, specifications, policies and good engineering practices. The incumbent ensures that project personnel perform adequate sampling and inspection on Quality Control for Performance (QCP), Pay for Performance (PFP), and Quality Control/Quality Assurance (QC/QA) projects. During periods of high work volume, the incumbent may be required to perform the before mentioned field tests. The incumbent also reviews proposed borrow sites and prepares documentation for the approval, disapproval or modification of proposed borrow sites. The incumbent acts as Radiation Safety Officer which involves ensuring the personnel who use the nuclear testing equipment are knowledgeable and comply with applicable regulations. When required, the incumbent assists the Geotechnical Engineer in preparing soils profiles, stability analyses, and recommendations to other bureaus. The position is unique in that the use of soils as a construction material is not an exact science and it requires an incumbent who has a thorough knowledge of soils, soil mechanics, soil testing, construction procedures, specifications, policies, and an understanding of the practical engineering of good embankments and sub-grades.

Typical problems involve finding solutions for unstable soil conditions; recognizing or determining the construction characteristics of the soil types available for each project; monitoring progress during construction for changing soils and anticipating any problems; assisting project personnel in acquiring an understanding of good embankment construction procedures; coordinating with contractor's personnel and resolving conflicts on QCP, PFP, and QC/QA projects; assisting senior Embankment and Nuclear Technicians in obtaining compliance by local agencies on state financed projects; obtaining contractor compliance with contract provisions; and ensuring that tests conducted by subordinates are in compliance with District testing policy. The greatest challenge confronting the incumbent is to ensure that all embankments and subgrades provide stable roadway foundations.

ET IV, Geotechnical Field Supervisor, District 9 Page 2

The incumbent personally assigns personnel to projects; ensures that adequate inspection is made on all projects on a periodic basis; reviews problems and makes recommendations as necessary; reviews all soils embankment and hot mix asphalt density reports prepared by subordinates for federal, state and city projects; reviews reports submitted by the Radiation Monitoring Service to assure that personnel comply with Department of Health radiation regulations; collects samples and prepares approval documentation for proposed borrow pits; takes independent assurance samples on all embankment, aggregate, and hot mix asphalt density tests; trains and supervises embankment inspectors; and assists the Geotechnical Engineer with soils profiles and other office related work as needed.

The incumbent accomplishes goals through the following subordinates:

Senior Embankment and Nuclear Technicians (4): Responsible for ensuring that effective embankment construction procedures and subgrade controls are maintained on all projects within the District.

For these subordinates winter assignments may involve assisting in soil surveys or in other bureaus. The duties of these subordinate positions may be performed by temporarily assigned employees as required.

The incumbent has latitude to make decisions in the area of assigned responsibility but must obtain approval of his/her supervisor for important soils recommendations and keep him/her informed of anticipated problems and pertinent changes of assigned personnel. S/He recommends the purchase of necessary supplies and services. The position operates under Departmental rules, orders, policies and specifications. This position requires a valid driver's license; 24/7 emergency call-out availability; extensive travel within the district and some travel statewide; possible overtime; possible overnight stays for training; heavy/repetitive lifting up to 50 lbs; work in confined spaces; climb steep terrain; wade in water; deal with animals, insects, rodents, snakes; perform outdoor work in a variety of conditions including, but not limited to inclement weather (hot, cold, wet, windy, muddy), active construction sites and roadways open to traffic.

Within the Department there are frequent contacts with the District Bureau of Operations, and Local Roads and Streets and Construction Sections to discuss soils related construction and maintenance problems. The Central Bureau of Materials is often contacted to discuss the maintenance and calibration of nuclear testing equipment. Outside contacts are with the Department of Health and the Nuclear Monitoring Service to discuss use of the nuclear testing equipment. Other contacts are with contractors, consulting firms, County Engineers, and Aeronautics personnel to discuss construction projects.

The incumbent is evaluated based upon the ability to anticipate problems, the ability to make sound decisions which will be accepted as authoritative, and the ability to obtain a good level of performance by subordinates.

Principal Accountabilities

- Responsible for becoming familiar with the soil types and construction characteristics to be expected on each project and to monitor each project and anticipate problems or otherwise aid in solving soils foundation problems.
- 2. Responsible for supervising the density testing of embankments and hot mix asphalt pavement construction by nuclear testing equipment and other methods.
- 3. Responsible for visiting all construction projects on a periodic basis to assure that adequate construction procedures are being used and that all applicable tests are being made as required.
- 4. Responsible for ensuring that personnel who use the nuclear testing equipment are knowledgeable and comply with applicable regulations.

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- 5. Responsible for performing applicable field tests during periods of high work volume.
- 6. Responsible for reviewing proposed borrow sites and preparing documentation for the approval, disapproval or modification of proposed borrow sites.
- 7. Responsible for reviewing all reports submitted to the District office by subordinate inspectors on federal, state, county and city projects.
- 8. Responsible for ensuring that his/her supervisor is made aware of progress and of significant problems occurring on construction projects.
- 9. Responsible for training, motivating and evaluating subordinate personnel.
- 10. Perform other duties as assigned.
- 11. Perform duties in compliance with departmental safety rules. Perform all duties in a manner conducive to the fair and equitable treatment of all employees.